

Mr. Chairman, Ranking Member Davis, and Members of the Committee - thank you for the opportunity to appear today.

I am Kim Zuhlke, Vice President of New Generation for Alliant Energy, an electric and gas utility serving portions of Iowa, Wisconsin and Minnesota – including areas of the Chairman's district in Iowa.

Small business is the job creation and economic development engine across most of the country. Our service territory is no exception. Having grown up on a farm and starting my career in the agricultural seed business, in my experience farmers are among the most courageous of small business people.

While I applaud your efforts to uncover the opportunities and remove the obstacles of expanding renewable energy use and production by all small businesses, my remarks will focus on farming.

There are two specific areas I will address as it relates to potential federal actions that could remove barriers and expand on-farm use and production of renewable energy; First, the deployment of anaerobic digesters and second, energy crop production for electric generation.

For those not familiar with digester technology, the system is designed to capture the methane that is produced as manure decomposes and convert it to a fuel that can be used either for pipeline quality gas, transportation or for on-farm electric generation.

By capturing and burning this methane it prevents the release into the atmosphere of a greenhouse gas that is twenty times more potent than carbon dioxide.

It is a domestic renewable fuel source.

The process eliminates much of the odor associated with traditional manure management systems and produces a by-product that can be put to profitable use as fertilizer for crops or in the lawn and garden industry.

At Alliant Energy we have partnered with four farm customers in our service territory to implement digester systems and have identified the following barriers to expanded use of manure digester systems.

First, there is no standard manure digester design - we need to have these systems be much more “plug and play.” Additional funding for research, development and demonstration projects could help. Grants to manufacturers to develop standardized systems would also be useful.

Second, there are issues of scale. For example, a herd of at least five hundred head is required today to make such a system economic. It does not provide a solution for the smaller family farm. Appropriate investments in research and development can help make these systems more scaleable. Alternatively, we could attempt to create cost-effective methods for small farms to transport manure to a central digester system. Here again, a specific grant to develop such a system would be appropriate.

Third, for most farm customers of any size, making the capital investment represents the largest single barrier. Grants, low or no-interest loans could go a long ways toward addressing this issue. We've found that tax credits are not as beneficial to most farm customers, unless they can potentially be sold to generate cash.

Lastly, on a more technical front, in order to make the system as efficient as possible one does need to achieve the right mix of enzymes and microbes in the digester. This is not always a simple task. Further research and development funding could help make this potentially complex part of the equation more of an off-the-shelf solution.

I'd now like to move now to energy crops. Alliant Energy is currently in the process of seeking regulatory approval to build two new coal-fired power plants. Both will be designed to co-fire biomass.

In order to accomplish this goal, we need farmers within fifty miles or so of the proposed plant sites to agree to grow these crops. While this is potentially very attractive to farmers, we are discovering certain barriers.

Corn prices have risen as the current and projected demand for corn-based ethanol has grown. Because there is a limit to what we can pay for an energy crop and still make co-firing economic at these new plants, we need to make growing energy crops attractive as well.

Switchgrass can grow on fields that may not be fertile enough to grow corn or is highly erodible. In many cases these fields are currently enrolled in the Conservation Reserve Program, or CRP. Changing the rules governing CRP land to allow farmers to grow and remove switchgrass for biomass production, without suffering the financial penalties they currently face when harvesting hay from CRP land, would go a long way toward addressing this issue.

By allowing eighty to ninety percent of the switchgrass on CRP land to be harvested once per year, it will continue to be a benefit to wildlife, maintain reduced erosion and allow for the production of a beneficial crop without increasing the federal price tag of CRP.

Once established, switchgrass is a relatively easy crop to grown and maintain. It is, however, difficult to get started and typically takes two to three years to become established. Grants, low or no-interest loans could help farmers defray up-front expenses and the potential loss of income as the crop is being established.

Switchgrass and other energy crops can either be used as fuel in a power plant or as a feedstock for future production of cellulosic ethanol. Both are beneficial and whatever incentives are established for one use should be generally equal for the other.

We look forward to working with our farm and other small business customers to make the expanded use and production of renewable energy a reality and welcome your support in meeting this goal.

Thank you.